

CLIPPEDIMAGE= WO009633306A1

PAT-NO: WO009633306A1

DOCUMENT-IDENTIFIER: **WO 9633306 A1**

TITLE: THERMAL-INSULATION ELEMENT MADE OF VEGETABLE FIBRES

PUBN-DATE: October 24, 1996

INVENTOR-INFORMATION:

| NAME | COUNTRY |
|--------------|---------|
| ZIMMER, HUGO | AT |

ASSIGNEE-INFORMATION:

| NAME | COUNTRY |
|------------------------|---------|
| ECCO GLEITTECHNIK GMBH | DE |
| ZIMMER HUGO | AT |

APPL-NO: EP09601658

APPL-DATE: April 19, 1996

PRIORITY-DATA: DE29506761U (April 21, 1995)

INT-CL (IPC): D04H001/60; D04H001/54 ; D04H013/00

EUR-CL (EPC): D04H001/60; D04H001/54, E04B001/76

ABSTRACT:

CHG DATE=19990617 STATUS=O>The invention concerns a thermal-insulation element made of vegetable fibres, the element consisting of a non-woven with a random three-dimensional structure. The non-woven used is a particularly high-volume one with a density $\leq 25 \text{ kg/m}^3$.

----- KWIC -----

Document Identifier - DID:

WO 9633306 A1

DERWENT-ACC-NO: 1996-485807

DERWENT-WEEK: 200115

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TITLE: High-vol. thermal insulation element - comprises nonwoven fabric made of vegetable fibres, with a random 3-dimensional structure, isotropic fibre orientation and low density

INVENTOR-NAME: ZIMMER, H

PRIORITY-DATA: 1995DE-2006761 (April 21, 1995)

PATENT-FAMILY:

| PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC |
|-----------------------------|-------------------|----------|-------|-------------|
| <u>WO 9633306 A1</u> | October 24, 1996 | G | 015 | D04H 001/60 |
| DE 59606409 G | March 8, 2001 | N/A | 000 | D04H 001/60 |
| DE 29506761 U1 | October 31, 1996 | N/A | 008 | D04H 001/42 |
| AU 9656909 A | November 7, 1996 | N/A | 000 | D04H 001/60 |
| CZ 9703273 A3 | January 14, 1998 | N/A | 000 | D04H 001/04 |
| EP 821746 A1 | February 4, 1998 | G | 000 | D04H 001/60 |
| HU 9801814 A2 | November 30, 1998 | N/A | 000 | D04H 001/60 |
| EP 821746 B1 | January 31, 2001 | G | 000 | D04H 001/60 |

INT-C_(IPC): D04H001/04; D04H001/40 ; D04H001/42 ; D04H001/54 ;
D04H001/58 ; D04H001/60 ; D04H001/64 ; D04H013/00 ; D06N007/00 ;
E04B001/74 ; E04C002/16

ABSTRACTED-PUB-NO: EP 821746B

BASIC-ABSTRACT: An insulation element made of vegetable fibres is claimed, in the form of non-woven fabric with a random 3-dimensional structure, isotropic fibre orientation and a density of not more than 25 kg/m³.

USE - Used esp. for thermal insulation and sound insulation.

ADVANTAGE - Provides an insulation element with a low density and good insulating properties, based on vegetable fibres.

ABSTRACTED-PUB-NO: WO 9633306A

EQUIVALENT-ABSTRACT: An insulation element made of vegetable fibres is claimed, in the form of non-woven fabric with a random 3-dimensional structure, isotropic fibre orientation and a density of not more than 25 kg/m³.

USE - Used esp. for thermal insulation and sound insulation.

ADVANTAGE - Provides an insulation element with a low density and good insulating properties, based on vegetable fibres.

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Document Identifier - DID:

WO 9633306 A1

| L Number | Hits | Search Text | DB | Time stamp |
|----------|-------|--|-----------|------------------|
| 1 | 1 | wo-9012906-\$.did. | EPO; | 2002/12/09 14:53 |
| 6 | 27 | (ret or retting ore retted) same (((disk or disc) near2 (refining or refiner or refined or refine)) or hammermill\$3 or hammer-mill\$3) | DERWENT | 2002/12/09 15:56 |
| 7 | 0 | (ret or retting or retted) same (((disk or disc) near2 (refining or refiner or refined or refine)) or hammermill\$3 or hammer-mill\$3) | USPAT; | 2002/12/09 15:46 |
| 8 | 0 | (ret or retting or retted) and (((disk or disc) near2 (refining or refiner or refined or refine)) or hammermill\$3 or hammer-mill\$3) | US-PGPUB | 2002/12/09 15:45 |
| 9 | 11 | (ret or retting or retted) and (((disk or disc) near2 (refining or refiner or refined or refine)) or hammermill\$3 or hammer-mill\$3) | EPO; JPO; | 2002/12/09 15:50 |
| 10 | 9 | (US-5981024-\$ or US-6296737-\$ or US-6074524-\$ or US-5858172-\$ or US-RE31862-\$ or US-3808090-\$.did. or (GB-2021030-\$.did. or (EP-422174-\$.did. | DERWENT | 2002/12/09 15:51 |
| 11 | 5 | (ret or retted or retting) and ((US-5981024-\$ or US-6296737-\$ or US-6074524-\$ or US-5858172-\$ or US-RE31862-\$ or US-3808090-\$.did. or (GB-2021030-\$.did. or (EP-422174-\$.did.) | USPAT; | 2002/12/09 15:52 |
| 12 | 3 | (ret or retted or retting) with (digester or steam or liquor) | US-PGPUB | 2002/12/09 15:55 |
| 13 | 1527 | (ret or retting ore retted) same (refining or refiner or refined or refine) | USPAT; | 2002/12/09 15:57 |
| 14 | 9 | (ret or retting or retted) same (refining or refiner or refined or refine) | US-PGPUB | 2002/12/09 16:00 |
| 15 | 17 | (retting or retted) and (refining or refiner or refined or refine) | USPAT; | 2002/12/09 16:00 |
| 16 | 15 | ((retting or retted) and (refining or refiner or refined or refine)) not ((ret or retting or retted) same (refining or refiner or refined or refine)) | US-PGPUB | 2002/12/09 16:55 |
| 17 | 311 | (162/97,98).CCLS. | USPAT; | 2002/12/09 16:56 |
| 18 | 1 | fibrillat\$3 and ((162/97,98).CCLS.) | US-PGPUB | 2002/12/09 16:57 |
| 19 | 513 | fibrillat\$3 same (adhesive or binder or ((bonding or binding) adj1 (fiber or agent or material or resin or substance or composition))) | USPAT; | 2002/12/09 17:09 |
| 20 | 12935 | (air\$1laid or air\$1laying or air\$1lay or dry-form\$3 or dryform\$3 or ((air or dry) adj1 (lay or laying or laid or form\$3))).ti,ab,bsum,clm. | US-PGPUB | 2002/12/09 17:05 |
| 21 | 24 | (fibrillat\$3 same (adhesive or binder or ((bonding or binding) adj1 (fiber or agent or material or resin or substance or composition)))) and ((air\$1laid or air\$1laying or air\$1lay or dry-form\$3 or dryform\$3 or ((air or dry) adj1 (lay or laying or laid or form\$3))).ti,ab,bsum,clm.) | USPAT; | 2002/12/09 17:09 |
| 22 | 624 | (flax or hemp) same (adhesive or binder or ((bonding or binding) adj1 (fiber or agent or material or resin or substance or composition))) | US-PGPUB | 2002/12/09 17:11 |
| 23 | 32 | ((air\$1laid or air\$1laying or air\$1lay or dry-form\$3 or dryform\$3 or ((air or dry) adj1 (lay or laying or laid or form\$3))).ti,ab,bsum,clm.) and ((flax or hemp) same (adhesive or binder or ((bonding or binding) adj1 (fiber or agent or material or resin or substance or composition)))) | USPAT; | 2002/12/09 17:11 |
| | | | US-PGPUB | |